

in the claims

This listing of claims will replace all prior versions, and listings, of claims in the application:

Claim 1 (Cancelled).

Claim 2 (Currently Amended) A micro-device as in claim 13, ~~characterized in that wherein~~ the deformable element is a member (11) or membrane.

Claim 3 (Currently Amended) A micro-device as claimed in ~~either any one of claims 1 or 2 or 13, characterized in that~~ further comprising electrostatic holders ~~are included configured~~ to hold the deformable element (11) in ~~it's~~ the deformed position after ~~it is switched, when the electrical electric control~~ current is cancelled.

Claim 4 (Currently Amended) A micro-device as in claim 3, ~~characterized in that wherein~~ the electrostatic holders further comprise ~~include~~ at least one pair of electrodes (16, 17; 18, 19) facing one another, ~~and where one of these elements such that one of the electrodes~~ forms a single piece with the deformable element (11), and the other is positioned such that, ~~when the deformable element has triggered, the distance between the facing electrodes is minimal~~ the distance between the facing electrodes is minimal when the deformable element is triggered.

Claim 5 (Currently Amended) A micro-device as in claim 3, ~~characterized in that wherein~~ the first and second electrostatic holders ~~include further comprise~~ at least one pair of facing electrodes, such that ~~and where one of these one of the~~ electrodes forms a single piece with the deformable element, and the other electrodes are

separated from each other by an electric insulator when said deformation being
~~positioned such that, when the deformable element has triggered the electrodes are in~~
~~contact with one another, but separated by electrical insulators is triggered.~~

Claim 6 (Currently Amended) A micro-device as claimed in any one of
claims ~~1 to 5~~ 2 or 13, ~~characterized in that wherein~~ the quasi-adiabatic resistors (25)
~~include~~ is composed of at least one layer deposited in the form of a wave.

Claim 7 (Currently Amended) A micro-device as claimed in any one of
claims ~~1 to 6~~ 2 or 13, ~~characterized in that wherein~~ the quasi-adiabatic resistors (14,
~~15)~~ are ~~is made from a material chosen from of one of~~ aluminum, manganese, zinc,
gold, platinum, nickel or inconel 600.

Claim 8 (Currently Amended) A micro-device as claimed in any one of
claims ~~1 to 7~~ 2 or 13, ~~characterized in that, with the micro device being made using~~
~~micro technology techniques, wherein~~ the deformable element is (11) ~~originates from~~
a layer (10) ~~deposited on a~~ said substrate (1).

Claim 9 (Currently Amended) A micro-device as claimed in any one of
claims ~~1 to 8~~ 2 or 13, wherein ~~characterized in that the conductors located on the~~
~~second level include a first line contact (4) and a second line contact (5), and in that~~
~~the effect of triggering the deformable element is to reduce~~ reduces to zero the
distance between the conductors (13) ~~on the first level and the conductors on the~~
~~second level, with the conductors on the first level thus forming an electrical link~~

~~between the first contract (4) and the second contact (5), and the micro-device thus constituting a microswitch said first and second contacts.~~

Claim 10 (Currently Amended) A micro-device as in claim 9, characterized
in wherein that the conductors supported by second contact provided at the
deformable element ~~are is constituted by~~ a conductive block (13).

Claim 11 (Currently Amended) A micro-device as claimed in any one of
claims ~~1 to 8~~ 2 or 13, ~~characterized in that wherein~~ the conductors on the first level
~~and the conductors on the second level~~ conductor and said at least one contact
constitute, respectively, a first electrode and a second electrode of a variable
condenser; and ~~where this the capacitance of the condenser has a first capacity value~~
~~before the switching of changes when the deformable element is triggered, and a~~
~~second capacity value after the switching of the deformable element.~~

Claim 12 (Currently Amended) A micro-device as in claim 11, characterized
~~in that wherein~~ an insulating layer of high dielectric constant separates the first
electrode and the second electrode of the condenser.

Claim 13 (New) A micro device comprising:

at least one contact;

a deformable element being supported for a motion with respect to said at least
one contact;

a conductor provided at said deformable element, said conductor approaching
said at least one contact upon deformation of said deformable element; and

a quasi-adiabatic resistor means provided at said deformable element such that thermal expansion of said quasi-adiabatic resistor by application of an electric current triggers said deformation.

Claim 14 (New) A micro device comprising:

a substrate having a surface with a first contact and a second contact;

a deformable element being supported for a reciprocating motion with respect to said first and second contacts, said deformable element having a top surface, and a bottom surface facing said first and second contacts;

a conductor located on said bottom surface and separated from and aligned with said first and second contacts, said conductor being configured to approach said first and second contacts upon a deformation of said deformable element; and

a quasi-adiabatic resistor means disposed on said top surface at a location such that thermal expansion of said quasi-adiabatic resistor by application of an electric current triggers said deformation while the temperature of said deformable element remains substantially unchanged.

Claim 15 (New) A micro device as in claim 14, wherein the deformable element is a member or membrane.

Claim 16 (New) A micro device as in claim 14, further comprising electrostatic holders configured to hold the deformable element in the deformed position after the electric current is cancelled.

Claim 17 (New) A micro device as in claim 16, wherein the electrostatic holders further comprise at least one pair of electrodes facing one another such that one of the electrodes forms a single piece with the deformable element and the other is positioned such that the distance between the facing electrodes is minimal when the deformable element is triggered.

Claim 18 (New) A micro device as claimed in claim 16, wherein the first and second electrostatic holders further comprise at least one pair of facing electrodes such that one of the electrodes forms a single piece with the deformable element and the other electrode are separated from each other by an electric insulator when said deformation is triggered.

Claim 19 (New) A micro device as claimed in claim 14, wherein the quasi-adiabatic resistor is composed of at least one layer deposited in the form of a wave.

Claim 20 (New) A micro device as claimed in claim 14, wherein the quasi-adiabatic resistor is made of one of aluminum, manganese, zinc, gold, platinum, nickel or inconel 600.

Claim 21 (New) A micro device as claimed in claim 14, wherein the deformable element is a layer deposited on said substrate.

Claim 22 (New) A micro device as claimed in claim 14, wherein triggering the deformable element reduces to zero the distance between the conductor and said first and second contacts.

Claim 23 (New) A micro device as in claim 22, wherein the conductor is a conductive block.

Claim 24 (New) A micro device as claimed in claim 14, wherein the conductor is a first electrode of a variable condenser and the first and second contacts are a second electrode of the variable condenser, respectively, and the capacitance of the condenser changes when the deformable element is triggered.

Claim 25 (New) A micro device as in claim 24, wherein an insulating layer of high dielectric constant separates the first electrode and the second electrode of the condenser.